

# AN ANALYSIS OF INCOME AND EXPENDITURE WITH SPECIAL REFERENCE TO BMTC, BANGALORE

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## ABSTRACT

*The motivation behind this investigation is to dissect the pay and consumption of BMTC by applying basic normal estimation technique. As far as contrasting its exhibition and proficiency for 3 years. It analyzes the data found inside an organization's benefit and misfortune account. The examination depended on optional information from records, reports and profile of the Bangalore metropolitan vehicle enterprise. Basic normal strategy is a technique which can be gotten by the normal pace of earnings and consumption things in the fiscal report and can be determined by duplicating the complete of the units essentially by the quantity of getting factors.*

*A goal of the investigation incorporates examining the productivity, perceiving the feeble functional regions and friends' in general monetary exhibition with appropriate idea for a superior adequacy and to defeat from the frail regions dissected in the organization. Transport is viewed as the existence line of the economy of the country. A productive street transport area, specifically, assumes a pivotal part in a district's financial advancement and development. Uniting both organic market sides, street transport area impacts whole range of social and financial exercises of a country. As of now, BMTC is one of the better run transport frameworks in the country.*

**Key words:** Comparative Analysis, Financial Statements, Profitability.

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## 1. INTRODUCTION

The term near examination is utilized to gauge the monetary connections between factors more than at least two announcing periods. Businesses utilize relative investigation as an approach to recognize their cutthroat positions and working outcomes over a characterized period. There are various approaches to gauge monetary execution as the financial backer might wish to look further into budget summaries and search out edge good and bad times. Near investigation is utilized with basic normal computation strategy basic normal technique is utilized by taking the normal of pay and costs by duplicating with factors to show up at the distinction. Gopinath (2019 b) concluded that based on the commercial activities impact to perception of electronic commerce practices by one way ANOVA test.

Most of the strong economies have adopted CSR principles within their corporate regulatory Mechanisms Gopinath (2019 a). Transportation is the fundamental wellspring of exchanging action which is a piece of financial development which takes care about development of people starting with one spot then onto the next. As we have different types of transportation in this paper creator focuses on the public transport transportation in Bangalore.

BMTC has achieved free presence with impact from 1997 after bifurcation from KSRTC. It began working under 2 level frameworks and later exchanged over to 3 level frameworks because of expansion in the volume of tasks.

## 2. REVIEW OF THE LITERATURE

Selvam *et al.* (2019) examines and estimates the value added Intellectual coefficient to measure the impact of intellectual capital on the Indian banking sector. The study confirms that there was progress in the overall performance of sample banks over the study period and the study also reflects the biased growth of a few sections in the Indian banking segment. Pavithran *et al.* (2018) concluded that the effect of adopting International Financial Reporting Standards, on the financial performance of sample companies of India during pre and post IFRS period of convergence. The study used Wilcoxon signed rank test, to test the statistical difference in financial ratios, prepared as per both the standards. Ganga *et al.* (2015) reveals that objective was to analyze the overall performance of the company and existing relationship between the current assets and current liabilities which helps in ascertaining the strengths and weakness in the operation and financial position of an enterprise. In this study used various research techniques to find the evaluation of financial performance of the company. Sathya and Umarani (2015) deciphered aims at to investigate the financial presentation of the organization and the 5 organizations. The exploration plan of the investigation is graphic examination plan and auxiliary information was gathered from the distributed sites of association for the examination. The apparatuses utilized for investigation is relative proportion examination of the monetary record. Appropriate proportions were outlined and determined to know the monetary exhibition of the organization. Gopinath *et al.* (2019) inferred that helpful to the financial planners and brokers for understanding pulse of the investors.

Hiran (2016) inferred that innovative copy examined the effect of liquidity proportion and furthermore examined the effect of influence proportion for example level of working Influence, level of monetary influence and joined influence on such proportions of productivity of organizations under investigation. The effect of working influence is reverse on working benefit shows higher extent of fixed expense in all out cost. Monetary influence is conversely identified with return on total assets in light of the fact that working benefit is less because of higher extent of fixed expense subsequently to increment working benefit the executives should attempt to build deals. Bijendra and Singhvi (2017) outlined that the study which aimed at analyzing profitability position of the Indian pharmaceutical sector. They conducted profitability of pharma companies having two main distinguishes facets which is a defensive

sector and it involves very high cost of Research & Development, which does not guarantee any assured returns. It was hence concluded that any firm with focus on Research & Development, Operating Profit and Gross Profit matters more, as their efforts Research & Development will generate returns after longer time period.

### 3. METHODOLOGY

**Secondary Sources:** Data involves the Bengaluru Metropolitan Transport Corporation manual, Bengaluru Metropolitan Transport Corporation website, annual administrative report BMTC magazines (Sanchara) and existing records.

**Period of the Study:** The study covered of 3 years income statement of BMTC located in Bangalore.

#### Objectives

- To compare its performance for various periods.
- To analyze its financial position with income and expenses.
- To measure the efficiency of its performance.

#### Hypothesis of the Study

There is significance association of various Divisional performance of the BMTC.

**H<sub>0</sub>**- There is no Significance relationship between total expenses among divisions of BMTC.

**H<sub>1</sub>**- There is a significance relationship between total expenses among divisions of BMTC.

There is a significance relationship between components of Revenues of BMTC.

**H<sub>0</sub>**-There is no significance relationship between various Incomes of BMTC.

**H<sub>1</sub>**-There is a significance relationship between various Income of BMTC.

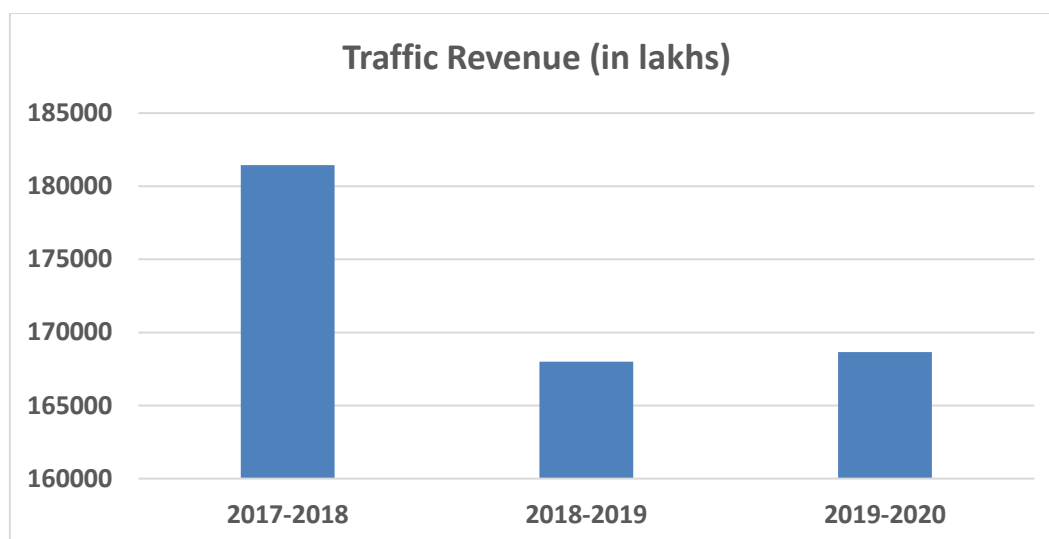
#### Limitations of the Study

- This study is confined only to Bangalore.
- The study was limited to only three years financial data (2017-2020).
- The study is purely based on secondary data.

### 4. ANALYSIS AND INTERPRETATION

**Table 1** Traffic Revenue from sale of tickets during the period 2017 to 2020

Sl. No.	Financial Year	Traffic Revenue (in lakhs)
1	2017-2018	181450.34
2	2018-2019	167998.91
3	2019-2020	168661.33
<i>Source: Data collected from the annual reports of BMTC</i>		



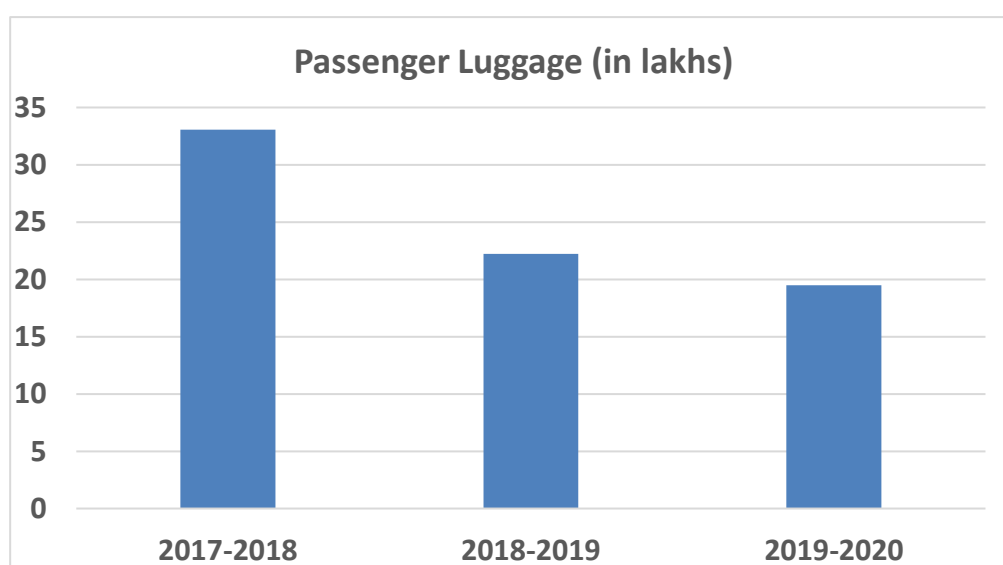
**Chart 1** Traffic Revenue from sale of tickets during the period 2017 to 2020

**Inference:** As per table - 1 and chart - 1 it depicts that the traffic revenue has reduced from the period 2017-18 to 2018-19 the reasons are introduction of Metro, Car Pooling was popular, the two wheeler loans were cheaper which prompted people to go for it hence people using BMTC reduced during this period. This also shows that the services of BMTC have to improve to attract its potential passengers. In the period 2019-2020 it is witnessed that there is a slight improvement in the revenue which can shoot up to a better level with the innovative strategies that can be implemented by BMTC.

**Table 2** Traffic Revenue from Passenger Luggage for the period 2017 to 2020

Sl. No.	Financial Year	Passenger Luggage (in lakhs)
1	2017-2018	33.06
2	2018-2019	22.22
3	2019-2020	19.48

*Source: Data collected from the annual reports of BMTC*



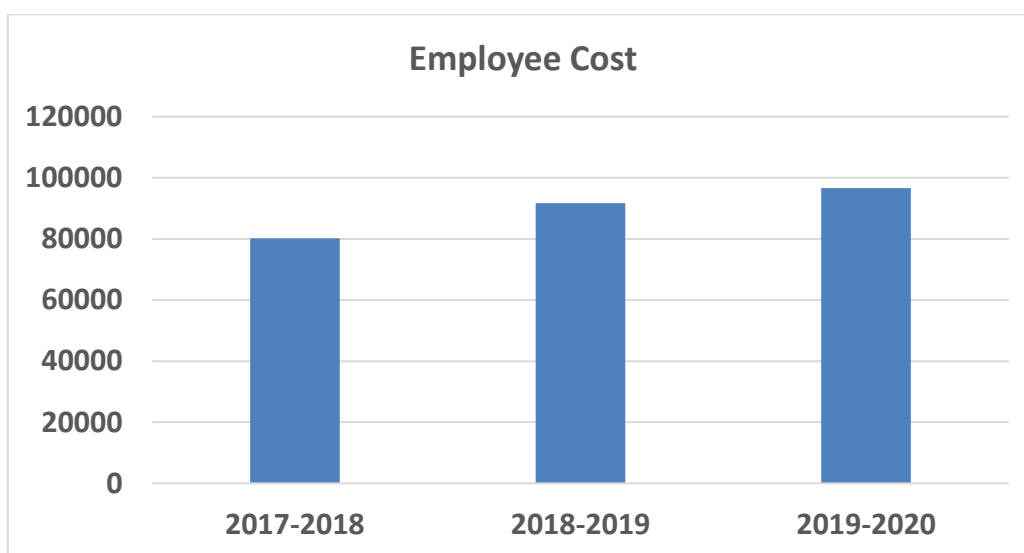
**Chart- 2** Traffic Revenue from Passenger Luggage for the period 2017 to 2020

**Inference:** As per table -2 and chart - 2 it depicts that the passenger luggage has reduced from the period 2017-18 to 2018-19 from 33% to 22% and from 2018-19 to 2019-20 there is a drop up to 3% the reasons are as follows the complaints received from passengers stating that buses do not arrive on time , do not halt at designated stops ,poorly designed , do not handle the luggage with care even though additional amount is been collected towards transportation of luggage care towards luggage is not to be found. These are the major factors resulting in decline in revenue from passenger luggage's.

**Table 3** Total employee cost of BMTC for the period 2017 to 2020

Sl. No.	Financial Year	Employee cost (in lakhs)
1	2017-2018	80198.14
2	2018-2019	91737.37
3	2019-2020	96632.85

*Source: Data collected from the annual reports of BMTC*



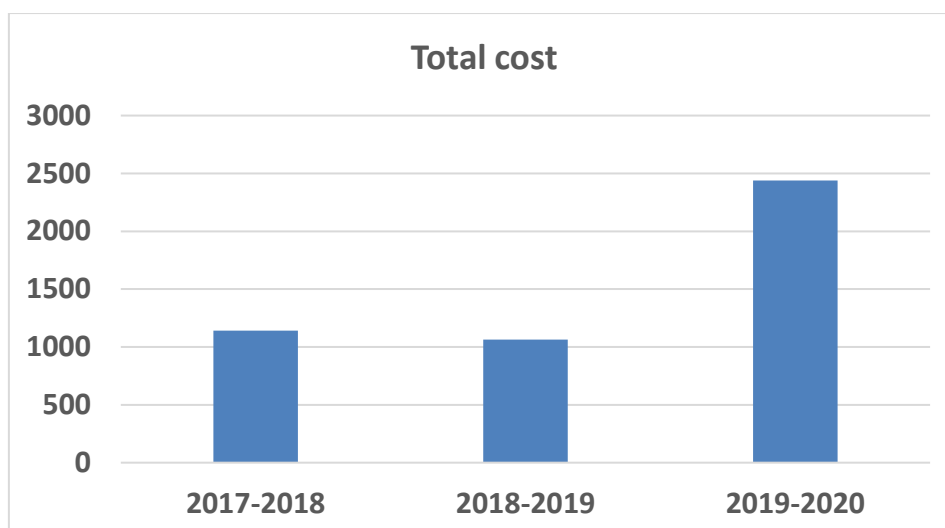
**Chart - 3** Total employee cost of BMTC for the Period 2017 to 2020

**Inference:** From the table - 3 and chart - 3 it shows that the cost towards employees as increased the reasons are increase in the salary of the staffs and BMTC as the work force of 35,267 people and 45% of its expenditure involves salaries of staff (As per 2017 annual report). The continuous appraisal in the salary and incentives to the employees of BMTC has resulted in the increasing employee cost even though increase in cost is a negative sign it shows that the BMTC has to retain its existing employees and the employees have bear the city compensatory allowances to lead a decent living, hence even though there is an increase in the employee cost it is justifiable.

**Table 4** Total cost of BMTC for the period 2017 to 2020

Sl. No.	Financial Year	Total Cost (in lakhs)
1	2017-2018	1140.61
2	2018-2019	1064.96
3	2019-2020	2438.02

*Source: Data collected from the annual reports of BMTC*



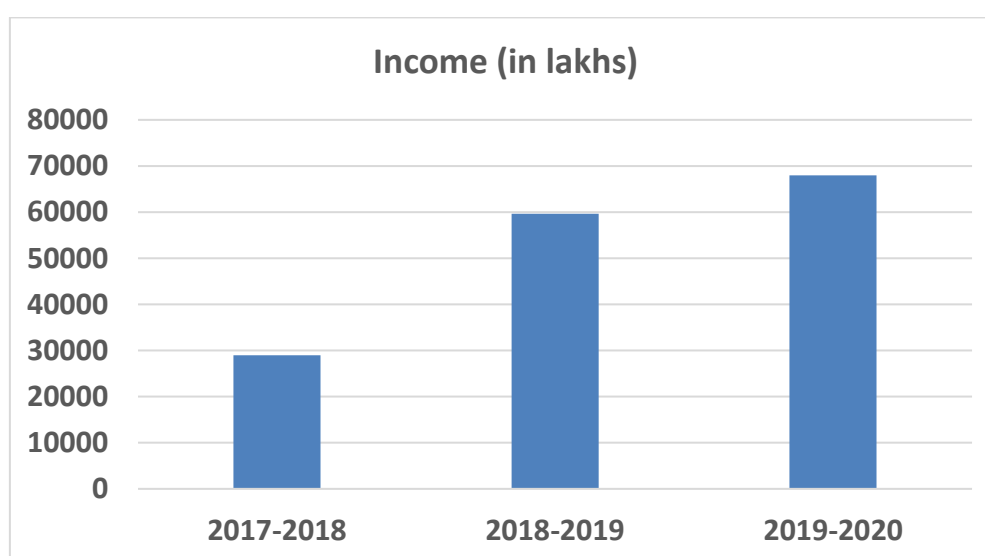
**Chart - 4** Total cost of BMTC for the period 2017 To 2020

**Inference:** According to table- 4 and chart - 4 the cost of BMTC has drastically increased from 2017-20 due to various reasons such as poor maintenance of the buses, high operating costs, introduction of many private buses and mini buses, scraping of old buses, strikes and other disturbances in the society resulting in distraction of buses which is an unreasonable expense to be borne by the government. Hence the total cost has been drastically increasing. there should be some strategies planned by BMTC to alter this situation.

**Table 5** Income statement of BMTC for the period 2017 to 2020

Sl. No.	Financial Year	Total Income (in lakhs)
1	2017-2018	28945.77
2	2018-2019	59654.27
3	2019-2020	67990.37

*Source: Data collected from the annual reports of BMTC*



**Chart - 5** Income statement of BMTC for the period 2017 to 2020

**Inference:** From the table - 5 and chart - 5 it is witnessed that there is increase in income of BMTC which is the result of increase in bus fares introduction of Volvo buses which supports better service with higher fare, due to traffic congestions people prefer BMTC for long drives which has resulted in increase in the percentage of people using BMTC which results in better income, increase in student passes also results in one time huge income and the buses flying towards airports have increased which attracts better fares for both passengers and luggage's .hence resulting in better income.

**Table 6** Showing correlation between current assets and current Liabilities

	<b>Total current assets</b>	<b>Total Current Liabilities</b>
<b>Total current assets</b>	1	-0.07
<b>Total Current Liabilities</b>	-0.07	1

It is observed that there is no correlation between Total Current assets and total current liabilities which indicates that it is moving in the opposite direction, if one variable increases the other variable decreases.

**Table 7** Showing correlation between Quick assets and Total Current Liabilities

	<b>Quick Assets</b>	<b>Total Current Liabilities</b>
<b>Quick Assets</b>	1	-0.33
<b>Total Current Liabilities</b>	-0.33	1

It is observed that the correlation between quick assets and total current liabilities valued to (0.33) which is negative position of the organization observed from the year 2017-2020. The study concludes that there is a negative correlation between the quick assets and current liabilities the correlation coefficient is calculated to be (0.33). This strong negative correlation signifies that as the quick assets increase the current liabilities decrease.

**Table 8** Showing correlation between Operating expenses and Net sales

	<b>Operating expenses</b>	<b>Net sales</b>
<b>Operating expenses</b>	1	0.91
<b>Net sales</b>	0.91	1

It is observed that the correlation between Operating expenses and Net sales is positive, which means that changes in operating expenses is related to the Net sales which shows the linear relationship.

**Table 9** Showing ANOVA analysis between various divisions of BMTC

<b>Groups</b>	<b>Count</b>	<b>Sum</b>	<b>Average</b>	<b>Variance</b>
East	3	12.76	4.2533	0.0001
West	3	11.45	3.8167	0.0005
North	3	12.05	4.0166	0.0005
South	3	12.21	4.07	0.0075
Central	3	12.79	4.2633	0.0040
BMTC	3	11.23	3.7433	3.333

<b>ANOVA</b>					
<b>Source of Variation</b>	<b>SS</b>	<b>df</b>	<b>MS</b>	<b>F</b>	<b>P-value</b>
Between Groups	0.701	5	0.14025	65.912	2.6
Within Groups	0.025	12	0.00213		
Total	0.728	17			

To test the significance among different divisions of BMTC analysis of variance (ANOVA) was applied. For testing the hypothesis by ANOVA procedure, F- Test was applied. In ANOVA table, calculated value of F-test with Corresponding p-Value is given.

**Table 10** Showing ANOVA analysis between incomes of BMTC

Groups	Count	Sum	Average	Variance
Traffic Revenue	3	13093.27	4364.42	12087.86
Other Revenue	3	13308.81	4436.27	33404630.28
Gross Revenue	3	16402.08	5467.36	10794.97

Source of Variation	SS	df	MS	F	P-value
Between Groups	2284777.82	2	1142389	0.1025	0.904
Within Groups	66855026.22	6	11142504		
Total	69139804.05	8			

To test the significance among various Incomes of BMTC analysis of variance (ANOVA) was applied. For testing the hypothesis by ANOVA procedure, F- Test was applied. In ANOVA table, calculated values of F-test with Corresponding P-Value are discussed.

## 5. CONCLUSIONS

BMTC is the most oldest and grounded public restricted organization which has made an adequate name and distinction in the personalities of public for the administrations advertised. This study analyzed the financial position and Income and expenses of the Bangalore Metropolitan Transport Corporation using ratio analysis and correlation based on financial statements. During study period of 3 years it was found that Current Ratio and Quick Ratio are resulted negative Operating Ratio was resulted Positive. The Traffic Revenue from sale of tickets and Passenger Luggage during the period were in decreasing trend it was noticed that in the year 2018 the revenue from sale of tickets was satisfactory, total employee cost and total cost of BMTC was in increasing trend. Division's and Income comparison also conducted to analyze the position using ANOVA. Hence it is suggested that the revenue from sale of tickets and passenger luggage should be increased by increasing the number of frequent buses to the bus stops. It shows that the expense towards workers as expanded the reasons are expansion in the compensation of the staffs, it is seen that there is expansion in pay of BMTC which is the consequence of expansion in transport passages presentation of Volvo transports which supports better help with higher charge. Subsequently if the drivers and staffs are furnished with acceptable preparing office to further develop the development BMTC can draw out its exhibition effectively.

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